
GEEKVAPE
2024
Geekvape Carbon
Neutrality Action Report

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01. A Letter from the Leadership

A letter from the Chairman

The Road to Carbon Neutrality, Action Now!

As climate change becomes an increasingly urgent issue, we have been contemplating how to contribute to the solution. Last December, we initiated our first group-wide carbon inventory, taking the first step in our exploration. Today, we release the Geekvape Carbon Neutrality Action Report, marking the first milestone in our journey towards carbon neutrality.

In this report, we have set ambitious goals for carbon neutrality: achieving operational carbon neutrality by 2035 and entire value chain carbon neutrality by 2050. This is our solemn commitment to the future. Although the road ahead is fraught with challenges, we are confident that with the tireless efforts and leadership of Geekvape, we will write a new chapter of green and low-carbon development.

As an emerging high-tech manufacturing industry, we believe that high-tech, high-efficiency, and high-quality intelligent manufacturing will play an irreplaceable role in advancing green, low-carbon, and sustainable development. To this end, we continue to promote lean management, digitalization and automation to drive manufacturing transformation and achieve our carbon reduction targets. The support we have received from our partners has been the driving force behind our goal of carbon neutrality. Similarly, our shared vision with our partners will be the backbone for us to continue progressing on the path to green and low-carbon development.

We have always maintained a positive, open, and transparent attitude towards addressing climate change. We actively respond to global calls for climate action, listen to the voices of stakeholders, discuss actions together, and share relevant information and results. We continue to monitor developments related to climate change, adjusting our programs and strategies in a timely manner to adapt to the evolving environment. In the future, we will move forward with determination. We will adhere to the principles of integrity, pragmatism, and steady progress. Through our own practices, we will contribute Geekvape's strength to the low-carbon development of the vape industry. Hand in hand with you, we will create a greener, low-carbon, better, and more sustainable future!

Wayne Zhang

Chairman of the Board, Geekvape
July 2024

A letter from the CEO

The Achievement of the Carbon Peaking and Carbon Neutrality Goals Begins with the First Step

Climate change has become a significant challenge that the world faces together. As a corporate citizen, we recognize the impact of climate change on our business operations and are taking active steps to address it. To this end, we have established Geekvape's carbon neutrality goals, formulated our carbon neutrality strategy, and planned our carbon reduction pathway based on the Science Based Targets initiative (SBTi). This is Geekvape's commitment to mitigating and adapting to climate change.

The vape industry is an emerging manufacturing sector, and we have been continuously exploring carbon reduction solutions tailored to this industry. In December 2023, we initiated a comprehensive greenhouse gas inventory across the entire value chain to identify all emission sources and establish a company-level carbon management system. With a detailed understanding of our carbon emissions, we comprehensively assessed various emission reduction scenarios and, for the first time, explicitly proposed Geekvape's carbon neutrality goals: achieving operational carbon neutrality by 2035 and value chain carbon neutrality by 2050.

We understand that achieving carbon neutrality is no easy task. To reach this ambitious goal, we will undertake carbon reduction efforts from multiple levels and perspectives. For example, we will integrate green and low-carbon concepts into every stage of the product lifecycle, from initial design to final recycling and reuse. We aim to reduce resource consumption through measures such as improving product quality and production efficiency. At the same time, we are committed to combining intelligent manufacturing with green and low-carbon development by enhancing energy efficiency, reducing energy consumption in buildings and industrial processes, and increasing the use of green electricity to promote environmental benefits in the manufacturing sectors. Furthermore, we actively promote green and low-carbon development throughout our supply chain by setting management targets for suppliers, enhancing their carbon management capabilities, and thereby increasing the resilience and stability of our supply chain. Lastly, we have established collaboration approaches with downstream waste recyclers to collect and recycle discarded products. We will continue to work together with our partners to contribute to addressing environmental and climate issues.

The journey ahead is long and arduous, but with determination, we will reach our destination. Geekvape's journey to carbon neutrality has just begun. We will seize this opportunity, adhere to a long-term perspective, and embed "green and low-carbon" into our corporate culture, helping us to progress further. We also look forward to more outstanding companies joining us on this journey towards a low-carbon future!

Allen Yang
Geekvape CEO
July 2024

02.
Executive Summary

Climate change is a common challenge for all humankind. In the face of significant climate change risks, many countries and regions around the world have formulated low-carbon development strategies and made commitments. The European Union has committed to achieving a 55% reduction in greenhouse gas emissions by 2030 compared to 1990 levels.

Global climate change, which causes extreme weather conditions such as persistent high temperatures and heavy rainfall, continues to pose new challenges to Geekvape's operations. Geekvape is highly concerned about the issue of climate change, therefore, we launched our first greenhouse gas emissions inventory work at the end of 2023, covering the entire value chain. Based on the results of the inventory, we have set 2023 as the baseline year and are planning to achieve operational carbon neutrality by 2035 and value chain carbon neutrality by 2050. To achieve these goals, we have explored various and efficient ways to reduce carbon emissions, especially through the innovative practices brought about by lean management, digitalization, and automation. Likewise, we are actively assisting the upstream and downstream enterprises in the value chain to achieve green and low-carbon development beyond our own practices.

The vape industry has long attracted significant attention from the public, motivating Geekvape to set high standards for carbon reduction efforts. This attention also presents important opportunities for Geekvape's green and low-carbon development journey. In the future, we will actively study global sustainable development trends, promptly track updates to climate-related and environmental regulations both domestically and internationally, and continuously assess the demands of external stakeholders for green, low-carbon, and circular products. Based on policy and market requirements, we will swiftly adjust our sustainable development strategies to seize opportunities in green and low-carbon development.

03.
About Geekvape

Founded on December 15, 2015, Shenzhen Geekvape Technology Co., Ltd. (Geekvape) is headquartered in Shenzhen, China. Geekvape is a global-leading vape solutions manufacturer, with its business encompassing product R&D, design, production, and branding operations. Geekvape is certified as one of the state-level high-tech enterprises that only a few in the industry can obtain.

Geekvape was the first in the industry to establish a foundational research institute, comprising a group of researchers and scientific research institutions. Our research covers new material applications, power supply cells, e-liquids, independent chips, and atomization technology. We have invested hundreds of millions of RMB to establish independent R&D and production systems, positioning ourselves as leaders in ceramic technology and chip technology within the vape industry.

Currently, Geekvape's portfolio includes brands such as GEEKVAPE, Wenax, Obelisk, GEEKBAR, and DigiFlavor. Our business extends to over 70 countries and regions worldwide, including Europe, America, Southeast Asia, the Middle East, Japan, and South Korea. Adhering to principles of steady operation, continuous innovation, and open to cooperation, Geekvape has developed end-to-end industrial advantages in multiple areas. We provide healthy and intelligent vape devices to our global customers, committed to breakthrough innovation and serving the future to build a better lifestyle.

Geekvape has formulated a green and low-carbon development strategy to achieve carbon neutrality. We are making every effort to promote green and low-carbon industrial upgrades, actively responding to climate change risks. We are methodically advancing the construction of standardized management systems for environmental, energy, and carbon emission management. By adhering to the positioning of environmentally friendly, low-carbon, and safe products, Geekvape leads the industry in the trend of green and low-carbon technology.

Corporate Mission

Partner-benefit Orientation

Partnership with customers, suppliers and employees are the most proud and valuable assets for Geekvape. Geekvape has always been altruistic and dedicated to the long-term interests of their partners. Internal collaborative progress, external openness and win-win.

Corporate Vision

Being Healthier

Health

Geekvape advocates a healthy lifestyle and promotes the transformation of smokers to a healthier and more pleasant lifestyle through science and technology.

Environmental Protection

Geekvape adheres to the positioning of green, low-carbon, and safe products, and is leading the trend of environmental protection technology in the industry.

Professional

Geekvape adheres to the path of specialization, keeps forging ahead, and leads the new trend of a healthy life with professional technology.

Corporate Value

Integrity

Be honest, and trustworthy. Be fair and frank. Keep the justice and have the courage of truth-telling.

Humbleness

Have confident with humility. Keep learning and a mindset of forging ahead.

Fraternity

Have mutual understanding. Trust, inspire, and help others. Be kind and altruistic.

Innovation

Be pragmatic. Be creative. Keep an unstoppable faith. Have courage of breakthrough and realize great value of yourself.

04. Geekvape's Carbon Neutrality Commitment

Based on Geekvape's development plan and our commitment to green and low-carbon transformation, we pledge to achieve operational carbon neutrality by 2035 and value chain carbon neutrality by 2050.

To fulfill this commitment, we have set 2023 as the baseline year and established scientific and reasonable emission reduction pathways based on the Science Based Targets initiative (SBTi). We have set various short-, medium-, and long-term carbon emission reduction targets, focusing on both operational and value chain emission reductions. We will implement the carbon emission reduction measures in phases and with a targeted approach.

By 2035

Achieve Operational Carbon Neutrality

(Scope 1&2)

By 2050

Achieve Value Chain Carbon Neutrality

(Scope 1,2&3)

Geekvape Officially **Joined the Science Based Targets initiative (SBTi)**

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Geekvape officially joined the Science Based Targets initiative (SBTi) on June 20, 2024.This demonstrates our ambition to combat climate change and our strong commitment to advancing sustainable development. Using 2023 as the baseline year, Geekvape commits to achieving a 42% reduction in carbon emissions for Scope 1 and Scope 2, and a 25% reduction in carbon emissions for 67% of Scope 3 by 2030.

Aiming to mitigate and adapt to global climate change, Geekvape will continue to provide customers and partners with products and services that have a lower carbon footprint and Eco-friendly. This ensures that the company advances along the path of green and low-carbon development while contributing to the sustainable development of the world.

Scope 1 and Scope 2 emissions will be reduced

42%↓

67% emissions of Scope 3 will be reduced

25%↓

COMPANY/FINANCIAL INSTITUTION	TARGETS			ORGANIZATIONTYPE	
	NEAR TERM	LONG TERM	NET-ZERO		
Shenzhen Geekvape Technology Co.,Ltd. China, Asia	COMMITTED			Company	View more

Geekvape officially joined the SBTi and made its commitment (Soruce: SBTi Targets Dashboard)

05. Sustainable Governance in Geekvape

The Board of Directors is Geekvape's highest decision-making body for sustainability, holding substantial responsibility for decision making and approvals on sustainability matters.

Sustainable Governance in Geekvape

To actively promote Geekvape's sustainability strategy, Geekvape has established a sustainability governance structure that includes the board of directors, senior management, and various business, functional, and production units. Geekvape also identifies sustainability challenges and opportunities to ensure that its efforts are efficiently and effectively targeted.

Geekvape has established a four-tier organizational structure for sustainable development. The board of directors serve as the highest decision-making body for sustainable development, responsible for substantive decision-making and approval of sustainability matters. The Sustainability Committee supervises, makes decisions, and guides the implementation of sustainability work, reporting directly to the board. The Sustainability Working Group handles day-to-day management tasks and facilitates the execution of specific tasks across various business, functional, and production units.

Highest Decision-Making Level Board of Directors

Board of Directors

Supervisory Decision-Making Level

Sustainability Committee

- Consists of CEO, the heads of highly-relevant business unit.
- Meetings are held quarterly
- Review and confirm the corporate's sustainability strategy, commitments, goals, and key issues
- Review and confirm the corporate's sustainability strategy, commitments, targets, key issues, major projects, and sustainable development strategies to ensure that sustainability disclosures integrated into the corporate's strategic development and submit decisions and approvals to the Board of Directors.
- Provide necessary resources, supervise and guide the implementation of sustainability work, and regularly review sustainable development performance.

CEO

Day-to-day Management Level

Sustainability Taskforce

- Consists of department heads from Business, Operations, Production, and other departments or designated representatives.
- Regular meetings and ac hod meetings
- Formulate sustainability policies, management processes, and roadmaps, and establish a sustainable development performance indicator system.
- Coordinate the execution of cross-departmental sustainability projects and supervise project progress to ensure targets are achieved.
- Compile sustainability reports and corresponding disclosure information.
- Establish special sustainability taskforce as needed based on actual circumstances.

Sustainability and ESG Director

Implementation Level

Business, Functional and Production Units

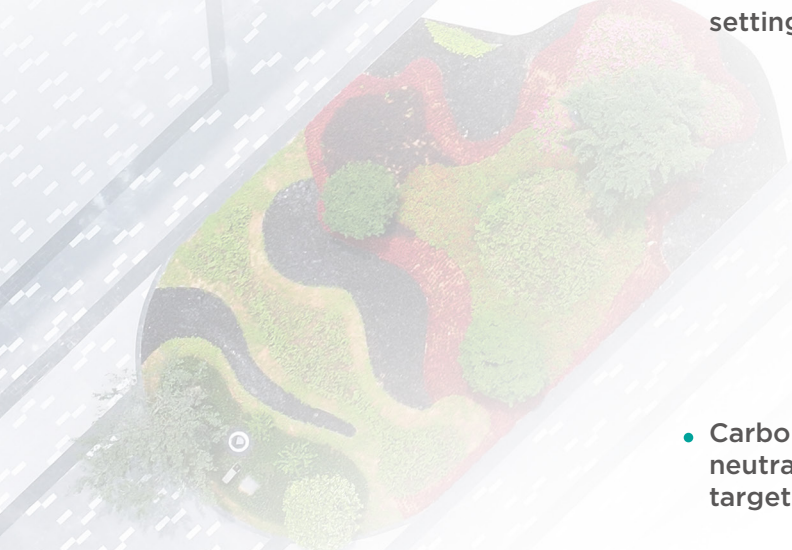
Implement specific sustainability tasks according to the targets set and regularly report the results.

Organizational chart for sustainability in Geekvape

06. Geekvape Carbon Neutrality Action Plan

Carbon Neutrality Pathway Planning

Geekvape has developed an overall pathway planning for setting carbon neutrality goals. First, we initiated an GHG inventory in 2023 and conducted company-wide research and interviews with leadership and relevant departments. Second, based on the results of the inventory and research, we made reasonable predictions about future carbon emissions under various scenarios and mapped out the trend of carbon emission increase. Finally, in accordance with the requirements of the SBTi, we have set the ultimate carbon neutrality goals, interim carbon reduction targets and corresponding measures at each stage to guide Geekvape towards becoming a leader in carbon neutrality within the vape industry.



Geekvape's Carbon Neutrality Pathway

1. BAU stands for Business As Usual, meaning in the scenario that taking no action on reducing any GHG emissions.

GHG Emissions of Baseline Year

To better plan Geekvape's carbon neutrality roadmap, we have completed a corporate GHG inventory for Scope 1, Scope 2, and 15 categories of Scope 3 emissions, following international standard and requirements.[2] This inventory covered all operational sites under the operational control of Geekvape, including Shenzhen headquarter office and manufacturing sites in Dongguan and Zhuhai.

2. Standards include Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), Greenhouse Gas Protocol: Corporate Value Chain (Scope 3)Accounting and Reporting Standard, and ISO 14064-1:2018- Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Scope 1

(Direct GHG Emissions)

Emissions from fugitive sources, stationary sources, and mobile combustion sources in company office buildings and production sites

Scope 2

(Indirect GHG Emissions)

Indirect emissions resulting from the Geekvape's purchased electricity

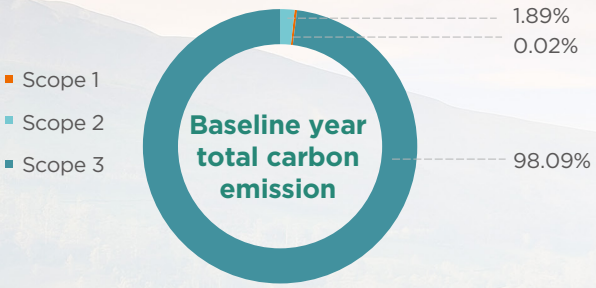
Scope 3

(Other Indirect GHG Emissions)

Indirect emissions associated with the upstream and downstream of the Geekvape's value chain, primarily consisting of purchased goods and services, using of sold products and downstream transportation and distribution

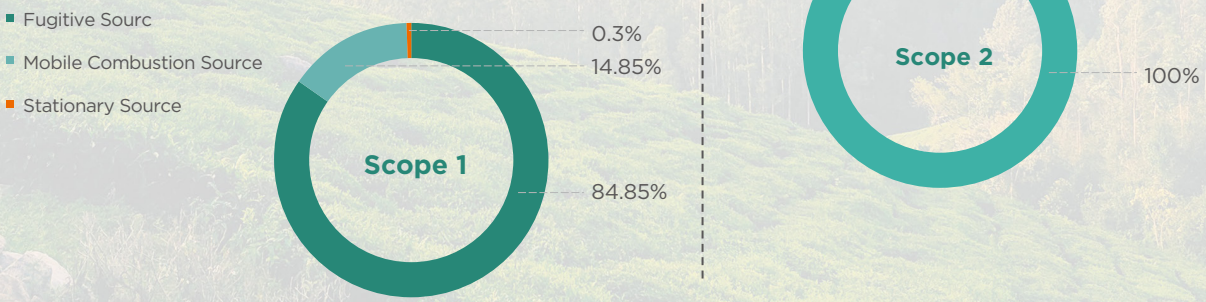
Composition of Geekvape's GHG emissions

Taking 2023 as the baseline year, our[3] total emissions for Scope 1, Scope 2, and Scope 3 amounted to 376,062.99 tons of CO e quivalent. Scope 1 accounted for approximately 0.02%, Scope 2 for about 1.89%, and Scope 3 for about 98.09%.



Of the Geekvape' s Scope 1 emissions, 84.85% are fugitive source emissions, which are primarily derived from fugitive refrigerant from split air conditioners in the manufacturing park; 14.85% are mobile combustion source emissions, which are fuel emissions from company-owned vehicles; and the remaining 0.3% of stationary source emissions are from natural gas using in dormitories.

All of Scope 2 emissions came from purchased

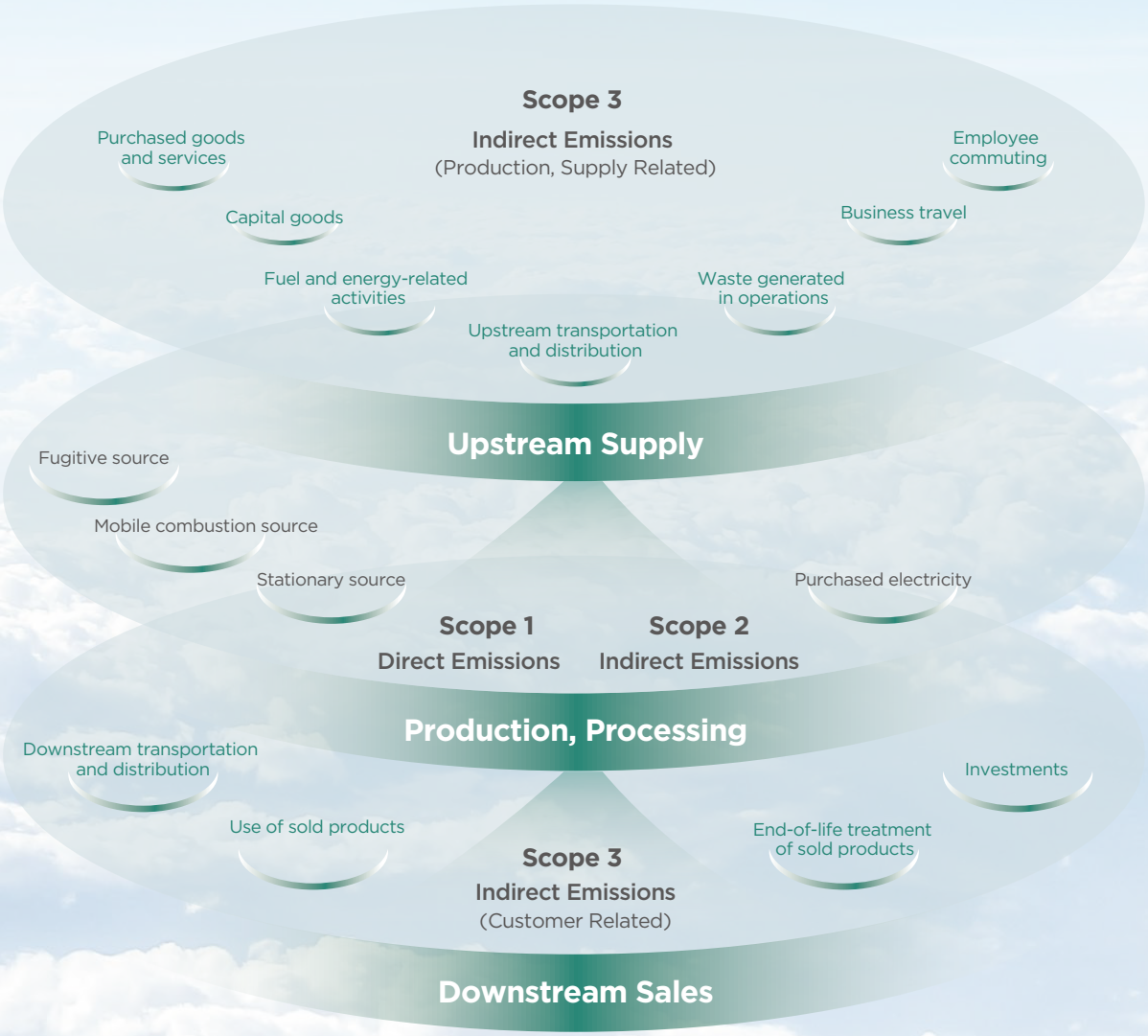


Composition of Carbon Emissions for Geekvape Scope 1 and Scope 2

3. "Our" refers to the boundary scope of the 2023 GHG Inventory, including: Shenzhen Geekvape Technology Co.Ltd., Guangdong Qisitech Co. Ltd., Zhuhai Qisitech Co. Ltd.

In collecting Scope 3 emissions4 Geekvape strives for data accuracy, working with over 80% of our core supplier partners to collect their Scope 1, Scope 2 and Scope 3 carbon emission data. We will continue to strengthen our supplier management and expand the scope of our supplier management, actively controlling the GHG emission throughout the supply chain.

Scope 3 Emission Categories

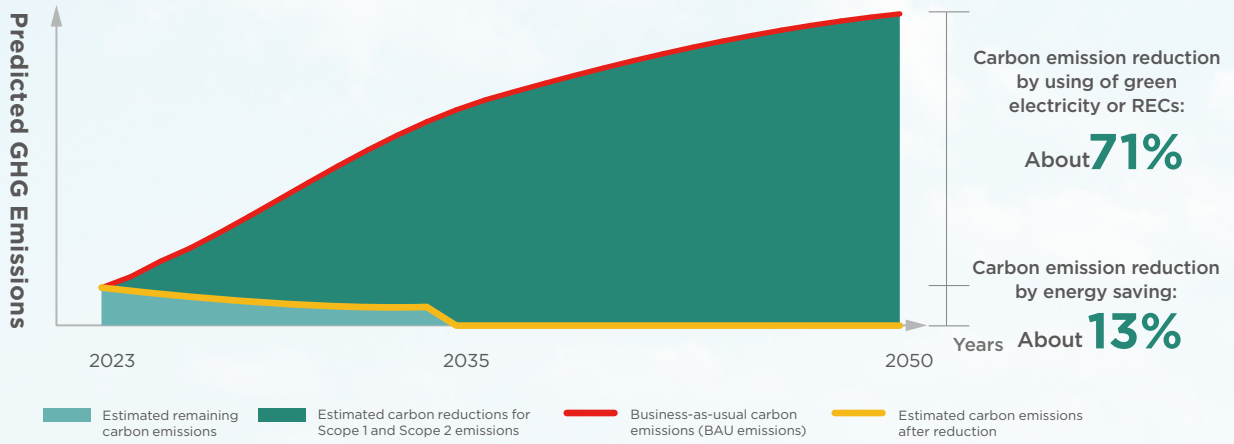


Geekvape's GHG Emission Sources

4. In Geekvape 2023 baseline year carbon inventory, the Scope 3 emission sources do not include Category 8 (Upstream Leased Assets), Category 10 (Processing of Sold Products), Category 13 (Downstream Leased Assets), and Category 14 (Franchises).
5. Other categories include capital goods, fuel- and energy-related activities, upstream transportation and distribution, waste generated in operate, business travel, employee commuting, end-of-life treatment of sold products, investments.

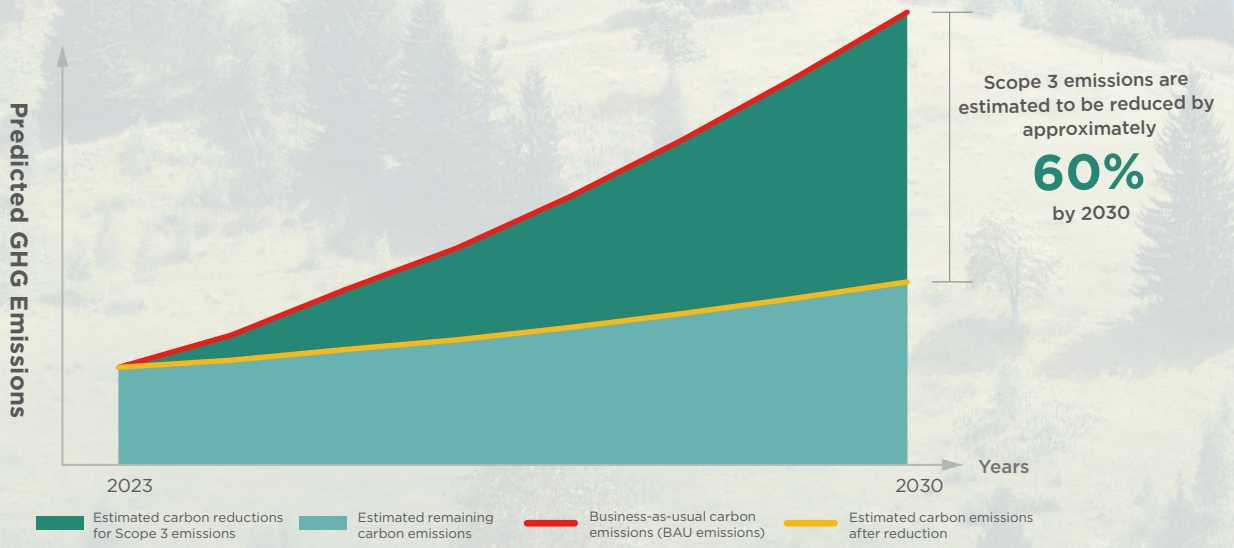
Carbon Neutrality Pathway Planning

Based on the planning of the Geekvape' s Carbon Neutrality Emission Reduction Pathway, our goal is to achieve carbon neutrality on Scope 1 and Scope 2 by 2035. To this end, we have implemented energy-saving and consumption-reducing measures, and are gradually promoting vehicle electrification, upgrading to low-GWP (Global Warming Potential) refrigerants, systematically constructing distributed photovoltaics at each factory, and increasing the use of low-carbon and renewable energy sources. We will be actively reducing Scope 2 carbon emissions using green electricity and the purchase of RECs. For the small amount of Scope 1 emissions that are difficult to eliminate, we will seek to purchase high-quality carbon credits to offset them.



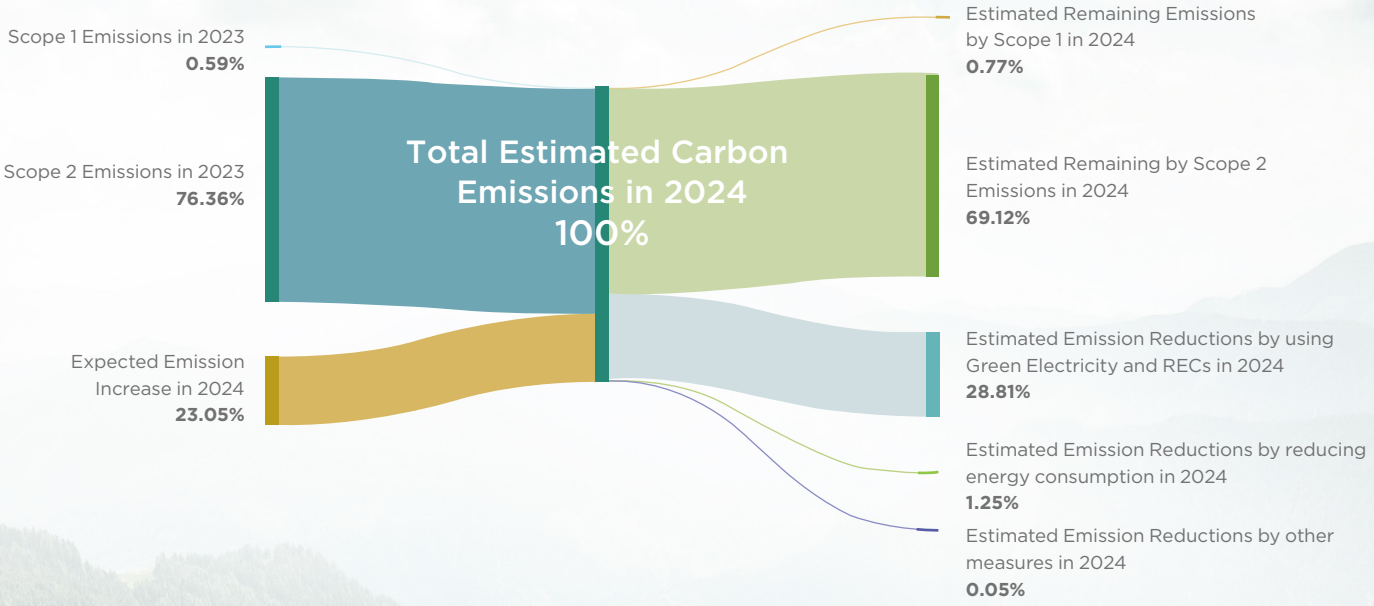
Geekvape Scope 1 and Scope 2 Emission Reduction Pathway Plan

For Scope 3, which involves various activities throughout the value chain, achieving reductions poses significant challenges. To meet this goal, we will first set carbon reduction targets for suppliers and work together to drive reduction efforts, thereby strengthening the resilience and stability of our supply chain. Second, we will promote lightweight product design to reduce the use of raw material and decrease transportation weight. Third, we will improve product efficiency to reduce energy consumption during the product use phase and promote the recycling of end-of-life products to increase material circularity. Finally, for the carbon emissions that are difficult to reduce, we will actively seek to purchase high-quality carbon credits for offsetting, aiming to achieve carbon neutrality across the entire value chain by 2050.



Geekvape Scope 3 Carbon Emission Reduction Pathway Plan

In 2024, we are focusing our carbon reduction efforts on operational emissions. Based on business growth forecasts, we estimate the total carbon emissions of 2024 and actively plan carbon reduction actions in multiple aspects, such as using green electricity, purchase RECs, reduce energy consumption and other measures to reduce the operational carbon emissions.



Projected Carbon Emission Reductions in Geekvape in 2024 (Scope 1 & Scope 2)

07.
Key Actions for Geekvape's Carbon Neutrality

Key Action 1 | Sustainable Product Design

Geekvape focuses on three main design concepts to achieve sustainability in the design phase product platformization, component modularization, and design standardization.

Products will be developed based on platforms. On the same platform, various specialized products will be created to meet different user needs. A mature platform will reduce changes in production processes and equipment, thus minimizing waste.

Product Platformization

Design Standardization

Component Modularization

All designs are developed based on standardized specifications. This allows mature technologies to be interoperable. Geekvape conducts pre-research on technologies that require exploration to find the best solutions, which are then standardized. By unifying the interfaces of different modules, Geekvape achieves diverse product offerings and higher module reuse rates, further enhancing product diversity and the reuse rate of platform modules.

The platforms are developed based on mature, advanced, and unique module designs. Standard interfaces are defined between modules, allowing combinations according to platform needs. This approach enhances product design and production efficiency, increases the reuse rate of platform modules, and forms economies of scale, facilitating automated module production.

Geekvape's Sustainable Design Concepts

Case Study Battery Design for Green Low-Carbon Modularization

In response to the diverse needs of users in the current vape market, customized products are gaining favor among channel retailers. In the Rechargeable POD System series, Geekvape has innovatively introduced a detachable battery design, contributing to the vape industry's gradual transition towards green, low-carbon, and environmentally friendly practices.

Geekvape detachable battery products offer a "1+n" purchasing model, where users can buy one device with multiple batteries. This model not only saves users costs but also reduces the consumption of key materials for vape device casings and other components. This approach significantly reduces the environmental impact of component production, contributing to resource conservation and a reduction in carbon emissions.

Moreover, Geekvape has refined the modular design of detachable batteries by dividing the battery pack into two parts: the battery cap and the battery module. This design allows different battery caps to fit various product sizes and battery modules to meet different capacity requirements, facilitating standardized and mass production of batteries.

Notably, when the battery is depleted, the product screen or specific light indicators prompt users to recycle the battery. Geekvape also provides instructions and guidance on battery disposal and recycling on product packaging, websites, and other platforms, encouraging environmentally responsible behavior among users.

Case Study Developing Biodegradable Casings for Vape Devices

To reduce the environmental pollution caused by the disposal of vape device, Geekvape has collaborated with universities and research institutions to develop a new type of biodegradable composite material for device casings. This material combines polylactic acid (PLA) and bamboo fiber, enhancing both toughness and heat resistance while being environmentally friendly.

PLA is a synthetic, biodegradable aliphatic polyester, typically derived from starch-rich natural plant materials such as corn, sugar beets, straw, and cassava. It is known for its good biocompatibility, biodegradability, and physical properties similar to virgin plastics.

Bamboo fiber is a natural plant fiber composed of cellulose, lignin, hemicellulose, and various extractives. Due to its high lignin content, which is similar to that of broad-leaved wood, bamboo fiber serves as an excellent alternative to wood.

The combination of PLA and bamboo fiber creates a composite material that not only meets the demands for environmental friendliness but also provides improved mechanical properties, including increased tensile strength and impact resistance while reducing production costs. The use of this material in Geekvape's device casings offers a unique bamboo texture and makes the products lighter.

Compared to the use of original materials, applying this biodegradable composite material for vape device casings reduces approximately 79.6% of carbon footprint per kilogram of unit weight.

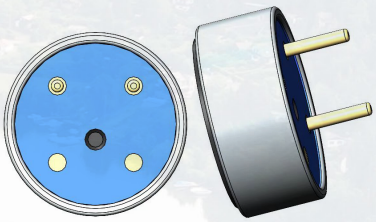
New biodegradable composite materials

Case Study Replacing Traditional Air Switches with MEMS Sensors

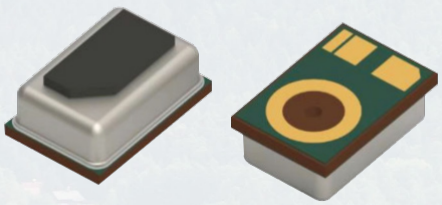
In previous products, Geekvape used traditional air switches controlled by diaphragm deformation caused by negative pressure. However, e-liquids and vapors could easily enter the diaphragm surface, leading to issues such as unintended activation and poor sensitivity. These problems shortened the product's lifespan and accelerated its obsolescence.

To improve product lifespan, Geekvape collaborated with companies that produce Micro-Electro-Mechanical Systems (MEMS) to develop custom Si-Mics specifically for vape devices. These specialized MEMS not only fulfill the switch function but also address issues of unintended activation and poor sensitivity associated with traditional air switches.

Compared to traditional air switches, the MEMS sensors reduce switch size by 60%, increase resistance to e-liquid by five times, and enhance component production capacity by four times. The use of MEMS sensors also reduces the need for welding during production, thus enhancing functionality and extending the lifespan of the devices.



Traditional air switches

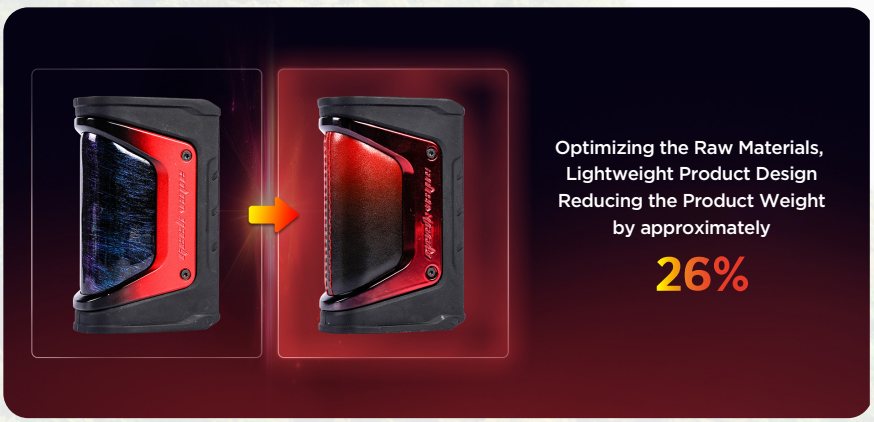


MEMS sensors

Case Study Optimized Design for Lightweight Production

Geekvape continuesly innovates in product development. This year, we conducted iterative updates on the AEGIS series. By optimizing the raw materials, we maintained the original product functions while making the manufacturing process easier and reducing the product weight by approximately 26%. This weight reduction not only decreases the amount of raw materials required but also lowers the carbon emissions associated with procurement and transportation.

Looking forward, Geekvape will continue to incorporate carbon reduction technologies into product development, advancing towards creating more low-carbon products.



Weight reduction of new AEGIS products

Key Action 2

Green and Low-Carbon Manufacturing

Factories are one of the primary sources of carbon emissions for manufacturing industry. For Geekvape, achieving green and low-carbon manufacturing is crucial for carbon reduction and lays a solid foundation for supply chain carbon neutrality and sustainable products. We adhere to the principle of prioritizing energy saving and actively explore the development opportunities for building green and low-carbon factories through lean production, equipment energy-saving retrofits, and the use of clean energy.

Low Carbon and Energy Saving Design

From the inception of Geekvape' s production facility, an energy management system was implemented to enhance energy efficiency and reduce carbon emissions throughout the production process.

In our Zhuhai industrial park, we have installed a waste heat recovery system for air compressors. During the compression process, air compressors convert only about 20% of the energy into air kinetic energy (compressed air), while the remaining energy is released as heat and carried away by heat exchangers. The waste heat recovery system captures this excess heat, which would otherwise be wasted, and repurposes it for water heating in employee' s dormitories, thereby achieving energy recycling and reducing overall energy consumption.

Case Study

Geekvape Zhuhai Intelligent Industrial Park Awarded LEED Platinum Certification

In March 2024, Geekvape-owned Zhuhai Qisi Intelligent Industrial Park was awarded the highest-level certification—Platinum by the world' s most renowned green building rating system, Leadership in Energy and Environmental Design (LEED) v4 ID+C: Commercial Interiors. This landmark project has become the first in Zhuhai to receive the LEED ID+C: Commercial Interiors Platinum certification. Moreover, it is the first project in the domestic vape industry to be honored with the LEED Platinum certification. It is also the first project among self-built industrial parks in the global vape industry to achieve this distinguished LEED Platinum certification.

LEED ID+C: LEED Platinum for Commercial Interiors

The design of the park incorporates numerous green and low-carbon building technologies. The entire park embraces "sponge city" design techniques to enhance its climate resilience, ensuring efficient water management and reducing the impact of heavy rainfall. Low-emissivity (Low-e) glass is used in the walls to minimize indoor energy loss, and all elevators are equipped with kinetic energy recycling devices to reduce electricity consumption. In future, Geekvape will continue to uphold its commitment to green, low-carbon, and energy-saving principles, further advancing its environmental sustainability goals.

Zhuhai QISI Intelligent Industrial Park

Lean Production

Reduction of Operational Carbon Footprint

As market conditions and customer demands evolve, the production goals have shifted towards greater product diversity, large-scale production, and shorter delivery times. Compared to traditional assembly line operations, lean production lines significantly reduce processes, shorten supply and demand cycles, increase per capita output value, save factory space, and enable cloud-based operating systems for 100% digital coverage. This approach also supports paperless and energy-saving production and office operations, ultimately achieving power consumption savings.

Lean Production Lines

Achieving

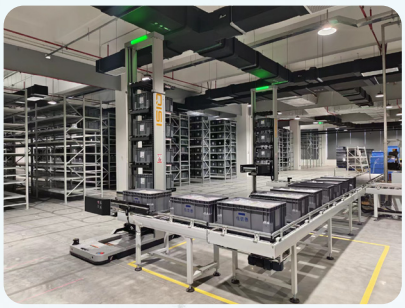
100%

Digitalization

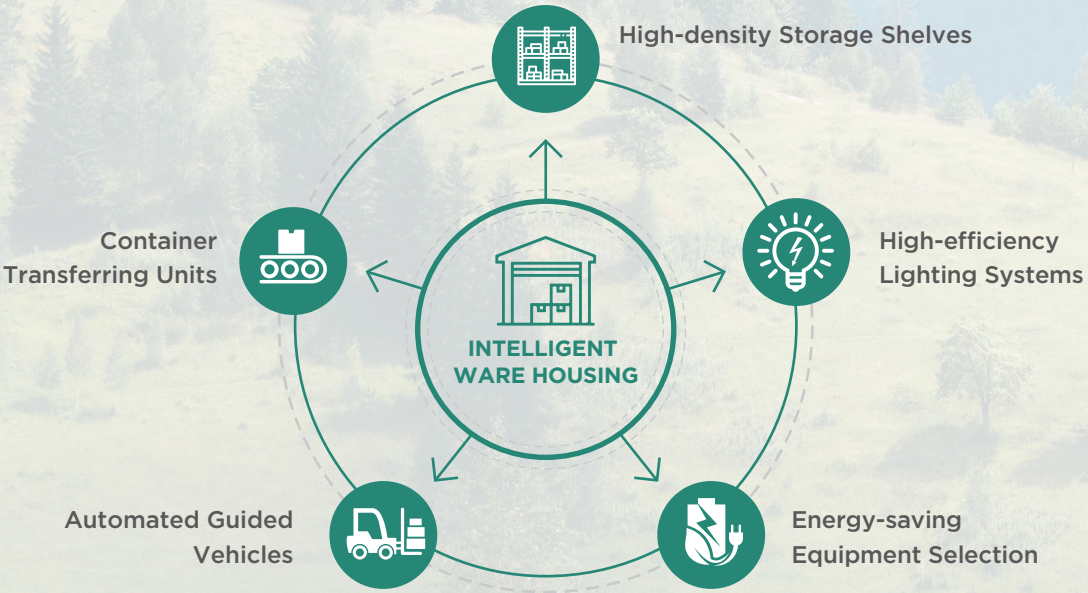
Paperless for production and office

Case Study Intelligent Warehouses and Logistic System

Geekvape employs advanced smart warehousing technology, which not only optimizes overall picking efficiency and enhances operational efficiency but also maximizes warehouse space utilization. This technology reduces the need for extensive warehouse lighting, improves production efficiency, and consequently lowers the factory's overall operational carbon emissions.



Intelligent warehousing comprises five key components: high-density storage shelves, CTU (Container Transferring Units), AGV (Automated Guided Vehicles), high-efficiency lighting systems, and energy-saving equipment selection.



Key Action 3 | Product Recycling

Geekvape consistently promotes responsible consumption and purchasing decisions, advocating for and providing low-carbon and eco-friendly products to users. We adhere to the principles of durable product design and safe, reliable quality control, aimed at prolonging the product's lifespan. Additionally, at the end of the product's life, we collaborate with our partners to recycle the reusable materials from discarded products and properly dispose of the remaining parts.

Product Energy Efficiency Improvement

ECO mode is an operational mode focused on environmental protection and energy savings. By adjusting the product's system settings, ECO mode conserves energy during product use, thereby reducing energy consumption and carbon emissions.

Starting with the Geekvape L200 III open atomizer, we introduced ECO mode, which automatically reduces the product's power output to the minimum recommended power for the atomizer cartridge. This feature significantly prolongs the battery's lifespan. Our experiments and calculations have shown that using ECO mode with a fully charged battery can prolong usage time by at least 30%. Regular use of ECO mode can prolong the battery's lifespan at least 20%.

Geekvape L200 III Performance Enhancement at ECO Mode

Product Recycling and Reusage

Geekvape actively practices the principles of a circular economy by exploring innovative methods for recycling and reusing end-of-life products. We collaborate with distributors and retailers to offer consumers convenient, turnkey recycling solutions that facilitate easy disassembly, collection, and processing. Additionally, we will partner with specialized overseas recyclers to ensure the proper handling and reuse of discarded vape devices. Our focus is on designing products that can be easily disassembled into multiple recyclable components, allowing for safer and more convenient disposal in recycling bins and more efficient processing and reuse.

Case Study Recycling of Waste Vape Devices in Cooperation with Distributors

Since 2022, Geekvape has collaborated with our long-term partner Vapostore to implement a recycling program for vape devices. Vapostore has placed recycling bins for vape devices, batteries, vape cartridges, and atomizing cores in all its stores. These stores handle the initial recycling of these devices, which are then regularly transferred to recycling bins at Vapostore' s warehouse. Vapostore has also established a long-term partnership with PAPREC, a leading French waste recycling company, to ensure the final disposal of collected recycled waste.

Since the launch of the program, Vapostore has recycled several tons of discarded vape devices annually and has helped many consumers develop the habit of regularly disposing of their used devices at stores, making a positive contribution to environmental protection.

In-Store Recycling Bins for Vape Devices

Key Action 4

Low-Carbon Operations

Geekvape is committed to green and low-carbon development, adopting innovative management models and focusing on measures such as green office practices, green commuting, and green public welfare activities. By actively promoting "Green and Low Carbon Actions," we aim to create a healthy, sustainable working and living environment and contribute to the achievement of our carbon neutrality goals.

Green and Low-Carbon Office

We encourage our employees to actively participate in energy-saving and carbon reduction efforts in their daily work. This includes simple actions like turning off lights and air conditioning in unoccupied spaces, implementing waste segregation, and installing sensors in meeting rooms to automatically turn off lights when the room is empty. We are also promoting a paperless office, having saved about 72,000 sheets of office paper in 2023. This initiative not only reduces paper consumption and operating costs but also significantly conserves resources.

Measures

Energy-saving Lighting Systems

Sensors are installed to automatically turn off lights when spaces are unoccupied, significantly reducing energy consumption. We also actively harness natural daylight to illuminate workspaces .

Digital Office Solutions

We provide comprehensive digital platforms for office management, such as an intelligent recruitment management system. To minimize paper use, we encourage practices such as double-sided printing and reusing single-sided printed paper.

Highlight

Compared to 2022, Geekvape saved approximately 72,000 sheets of office paper in 2023.

72,000 sheets

Green and Low-Carbon Commuting

Geekvape encourages employees to adopt low-carbon commuting and provides various options to support this initiative. We actively collaborate with the government to establish bus stops and shared bike parking stations in factory areas, facilitating eco-friendly commuting for employees. Additionally, Geekvape will provides shuttle buses powered by new energy sources between employees' dormitories and the Intelligent Industrial Park. This initiative not only reduces carbon emissions but also significantly shortens employees' waiting times for shuttle buses, creating a win-win situation.

Fostering a Corporate Sustainability Culture

To cultivate a distinctive sustainability culture at Geekvape and enhance employees' awareness of sustainability and low-carbon practices, we have organized a series of training courses on sustainability for all our employees. These efforts are designed to support Geekvape's goals of sustainability and carbon neutrality.

Additionally, Geekvape actively engages in green and low-carbon community services activities as a new avenue for contributing to carbon neutrality. Through the establishment of the "V Project" volunteer organization, Geekvape hosts environmental and low-carbon activities, exploring green and low-carbon community practices tailored to Geekvape.

Case Study Guarding Baisha Bay - Mangrove Planting and Conservation

In response to "World Earth Day" on April 22, Geekvape's V Pproject volunteers partnered with the Shenzhen Spring Environmental Volunteers Association to organize the Guarding Baisha Bay - Mangrove Planting and Conservation event in Baisha Bay, Dapeng, Shenzhen, China, on April 27, 2024. This initiative aimed to contribute to ecological conservation.

During the event, the V Project volunteers planted over 70 mangrove saplings, including species such as Rhizophora stylosa, Bruguiera gymnorhiza, and Aegiceras corniculatum. These efforts aim to protect the wetland ecosystem. Additionally, the volunteers visited the Baisha Bay Mangrove Wetland Conservation Center to learn about various mangrove species such as the Heritiera littoralis, Kandelia obovata, Rhizophora stylosa, and Bruguiera gymnorhiza. This educational experience provided them with a deeper understanding of the critical role of mangroves in achieving carbon neutrality.

Guarding Baisha Bay - Mangrove Planting and Conservation

Case Study Reducing Marine Wastes for Blue Oceans

Zhuhai Qi'ao Island, renowned for its unique natural scenery and rich biodiversity, has faced increasing pollution from plastics, discarded fishing nets, and household waste due to tourism development. To raise awareness of marine conservation and reduce marine litter, Geekvape's V Project volunteers organized an ecological beach cleaning event themed Reducing Marine Wastes for Blue Oceans at Qi'ao Island on June 29th, 2024.

During the event, volunteers from Geekvape and QiSi actively divided the tasks as carrying garbage bags, holding garbage pickers, and pushing trolleys. They worked diligently to clean up marine litter in the Mangrove Conservation Area on Qi'ao Island. The volunteers collected a wide range of waste, including tiny cigarette butts, lighters, plastic bottles, glass bottles, light bulbs, slippers, discarded fishing nets, and foam boxes. Each piece of litter was a step towards protecting marine life, showcasing the environmental commitment of the "V Project" volunteers.

Reducing Marine Wastes for Blue Oceans

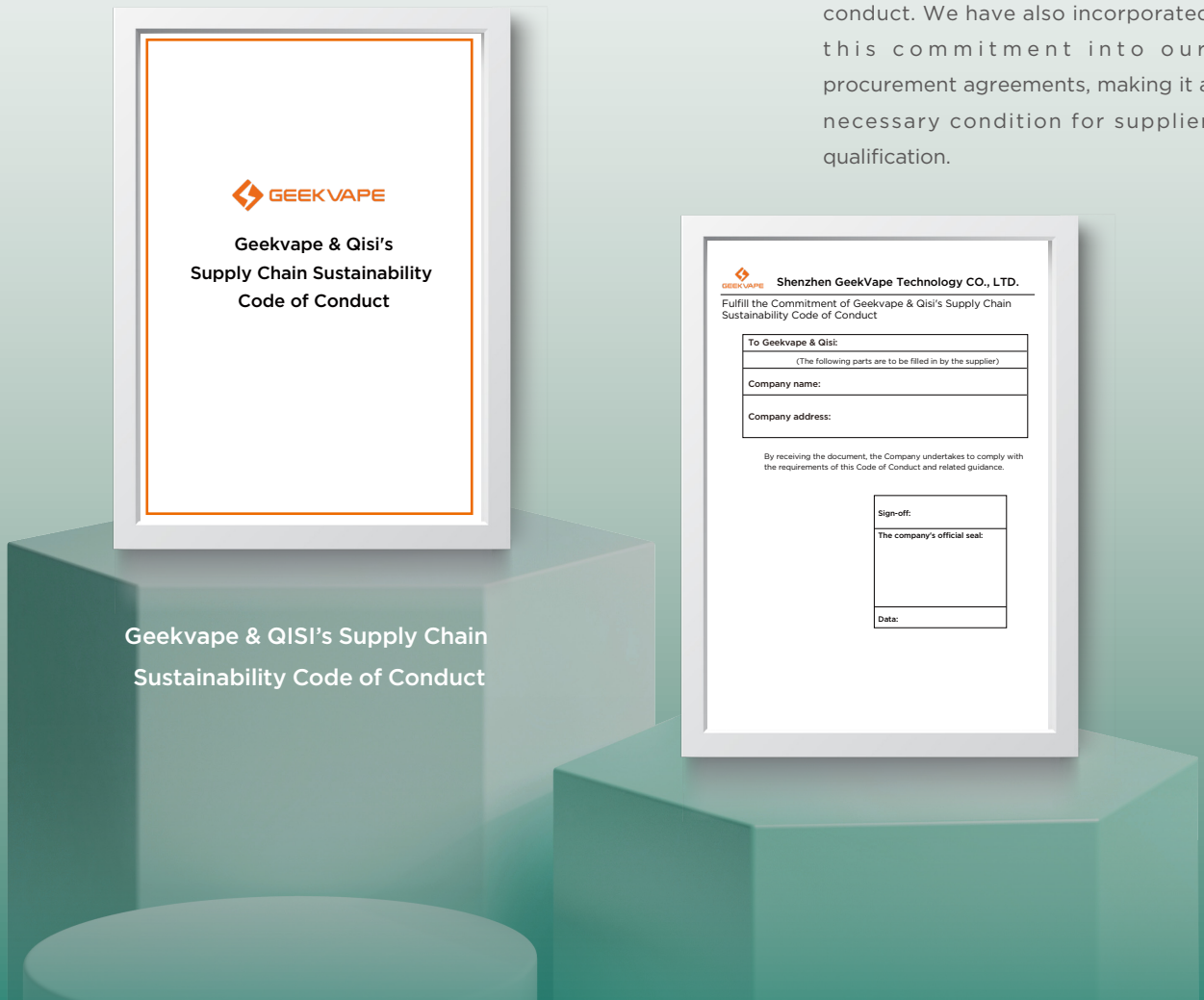
Key Action 5 | Sustainable Supply Chain

Geekvape recognizes that a sustainable, green, and low-carbon supply chain is crucial for the long-term and stable development of the company. As a key player in the industry chain, we are committed to working with partners across the entire value chain to improve carbon emission reduction performance.

Supply Chain Management

Together with our suppliers, Geekvape promotes the green and low-carbon transformation of the supply chain by implementing the supplier' s code of conduct and providing supplier incentives. This promotes positive development in upstream and downstream industries and enhances the emission reduction performance of the entire value chain.

In 2024, we released the Geekvape & Qisi' s Supply Chain Sustainability Code of Conduct, which provides guidance for suppliers on environmental protection, energy management, and carbon emission management. This code aims to work with our supplier partners to avoid ESG risks and strengthen our resilience of corporate sustainability, fostering growth together on the path of sustainability. The code outlines our joint commitment to actively establish environmental protection and response management systems to balance environmental, social, and economic needs. We also require our supplier partners to take actions during their operations to protect the environment and support global climate initiatives, aiming to reduce the environmental impact associated with their operations, products, and services, thereby contributing to sustainable development. As of the release of this report, all suppliers of Geekvape Group have completed their commitments to the code of conduct. We have also incorporated this commitment into our procurement agreements, making it a necessary condition for supplier qualification.



Case Study Geekvape Joins Sedex to Build a Sustainable Supply Chain

Sedex (Supplier Ethical Data Exchange) is a global platform dedicated to enhancing responsible and sustainable business practices. It aims to promote balanced development across commercial, social, and environmental aspects, helping businesses manage and improve their supply chain risks.

In February 2024, Geevape and its wholly-owned subsidiary, Qisi, joined the responsible business platform Sedex as a Supplier Plus Members. This move aligns with global trends in corporate sustainability and responds to the demands of stakeholders. By joining Sedex, Geekvape commits to upholding ethical business standards and continuously improving supply chain management performance. Through the Sedex platform, we collaborate closely with customers, suppliers, and other stakeholders to accelerate the implementation of responsible supply chains, aiming for sustainable operations.

Additionally, Geekvape will adopt SMETA (Sedex Members Ethical Trade Audit), a globally recognized audit method, to effectively evaluate and manage the company's performance in areas such as labor issues, human rights, worker health and safety, environmental compliance, and business ethics. This demonstrates Geekvape's commitment to sustainable development and its efforts to maintain high standards across its operations.

Sedex Premium Supplier Membership Certificate

Sedex Premium Supplier Membership Medal

08.
Looking Forward

Climate change has become a significant challenge that the world must face together. Corporates are no longer solely focused on pursuing economic benefits but are now increasingly integrating green and low-carbon concepts into their development strategies, corporate culture, and daily operations. A green, low-carbon, and sustainable development model are not only a response to policies but also a necessary choice for the long-term success of businesses. With the advent of the Carbon Neutrality era, companies face unprecedented challenges in transitioning their operations but also unprecedented opportunities.

As a leader in the global vape industry, Geekvape recognizes its crucial role in driving the industry's green and low-carbon transformation. The company actively incorporates green, low-carbon, and sustainability principles into every aspect of its operations, from R&D to production, marketing, and the recycling of end-of-life products.

Geekvape is committed to exploring and contributing to the low-carbon development of the vape industry. We maintain an open, cooperative, and win-win approach, actively collaborating with stakeholders to build a low-carbon ecosystem. Our goal is to foster a sustainable environment for the entire industry and society.

Looking ahead, Geekvape is determined, strategic, and capable of addressing the challenges and seizing the new opportunities brought by the green and low-carbon transition, actively embracing a sustainable future with concrete actions.

09. Appendix

Statement

This report outlines Geekvape's carbon neutrality goals and action plans, including forward-looking statements that may contain uncertainties. Various factors could lead to actual results differing from those stated in the report. In the future, we will disclose relevant information based on actual circumstances, with any adjustments reflected in the latest release.

Reporting Boundaries

Unless otherwise specified , the relevant data and information in this report cover Shenzhen Geekvape Technology Co.Ltd., Guangdong Qisitech Co. Ltd., Zhuhai Qisitech Co. Ltd..

Reference Standards

- ISO 14064-1:2018 Greenhouse Gas Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals
- Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Other applicable laws and regulations and related standards

Sources of emission factors for this GHG inventory include:

- The IPCC 2006 Guidelines for National Greenhouse Gas Inventories, Fifth Assessment Report, published by the United Nations Intergovernmental Panel on Climate Change (IPCC).
- Greenhouse Gas Emission Accounting Methodology and Reporting Guidelines for Enterprises issued by China's Ministry of Ecology and Environment, and the average carbon dioxide emission factor of each provincial power grid.
- Refer to other domestic and international emission factor databases, such as China Products Carbon Footprint Factors Database, Ecoinvent 3.10, UK Government GHG Conversion Factors for Company Reporting, etc.

The GHG Verification Report

DNV

VERIFICATION OPINION OF GREENHOUSE GAS STATEMENT

Opinion No.: 00024-2024-GHG-RGC
Date of issue: 13 May 2024
Page 1 of 6

This is to verify initiate reporting of Greenhouse Gas Emissions Inventory Report (2023) of

Shenzhen Geekvape Technology Co., Limited

Scope of Verification
DNV Business Assurance (DNV) has been commissioned by Shenzhen Geekvape Technology Co., Limited (hereafter the "Company") to perform a verification of its GHG Emissions Inventory Report(2023)(hereafter the "Inventory Report"), the scope of the verification is set to the reporting boundary covered by this Inventory Report, as detailed in Appendix A&B of this opinion.

Verification Criteria and GHG Programme
The verification was performed on the basis of following standards, as well as those given to provide for consistent GHG emission identification, calculation, monitoring and reporting.

- ☒ GHG Protocol – A Corporate Accounting and Reporting Standard (Revised edition)
- ☒ GHG Protocol - Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- ☒ ISO 14064-1:2018 - Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

The implementation process of the verification, is in accordance with the requirements of standards of ISO 14066:2023, ISO 14065:2010 and ISO 14064-3:2019 etc.

Verification Opinion
It is DNV's opinion that the Inventory Report (2023), which was published on 9 May 2024, is free from material discrepancies in accordance with the verification criteria identified as stated above. The opinion is decided based on the following approaches,

– For the Direct GHG emissions (Scope 1), Indirect GHG emissions from imported energy (Scope 2), and Other Indirect GHG emissions (Scope 3, incl. Category1/3-7/15) the reliability of the information within the Inventory Report (2023) were verified with reasonable level of assurance.
– For the remaining Other Indirect GHG emissions (Scope 3, incl. Category 2/9/11/12), the involved information was verified and tested using agreed-upon procedures (AUP).

In addition, the information listed in attached Appendix A&B&C were also verified during the process.

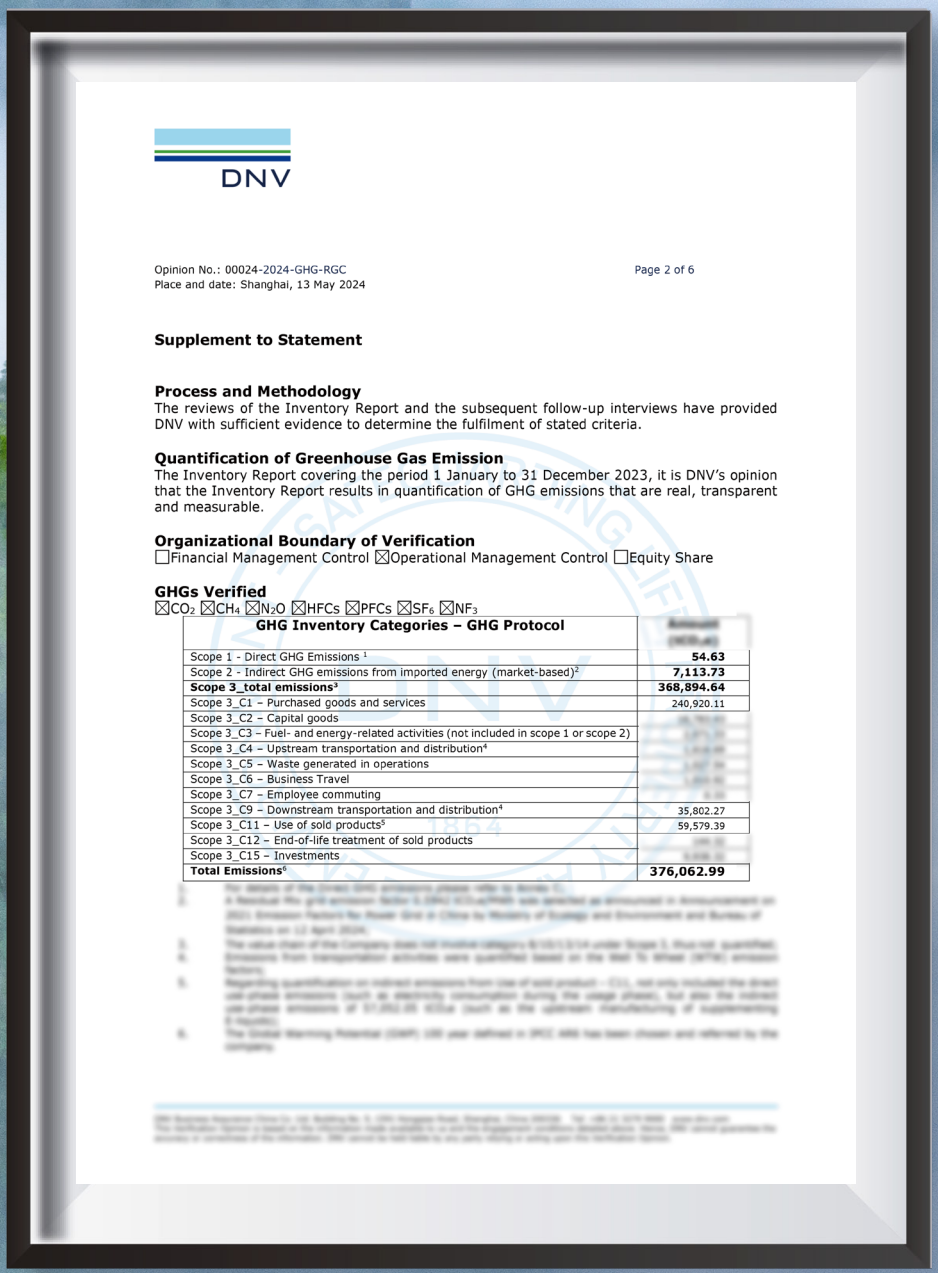
DNV Business Assurance China

SONG Ke
GHG Verifier

XU LiZhi Tony
Management Representative

Place and date: Shanghai, 13 May 2024

The GHG Verification Report



DNV

Opinion No.: 00024-2024-GHG-RGC
Place and date: Shanghai, 13 May 2024

Supplement to Statement

Process and Methodology
The reviews of the Inventory Report and the subsequent follow-up interviews have provided DNV with sufficient evidence to determine the fulfilment of stated criteria.

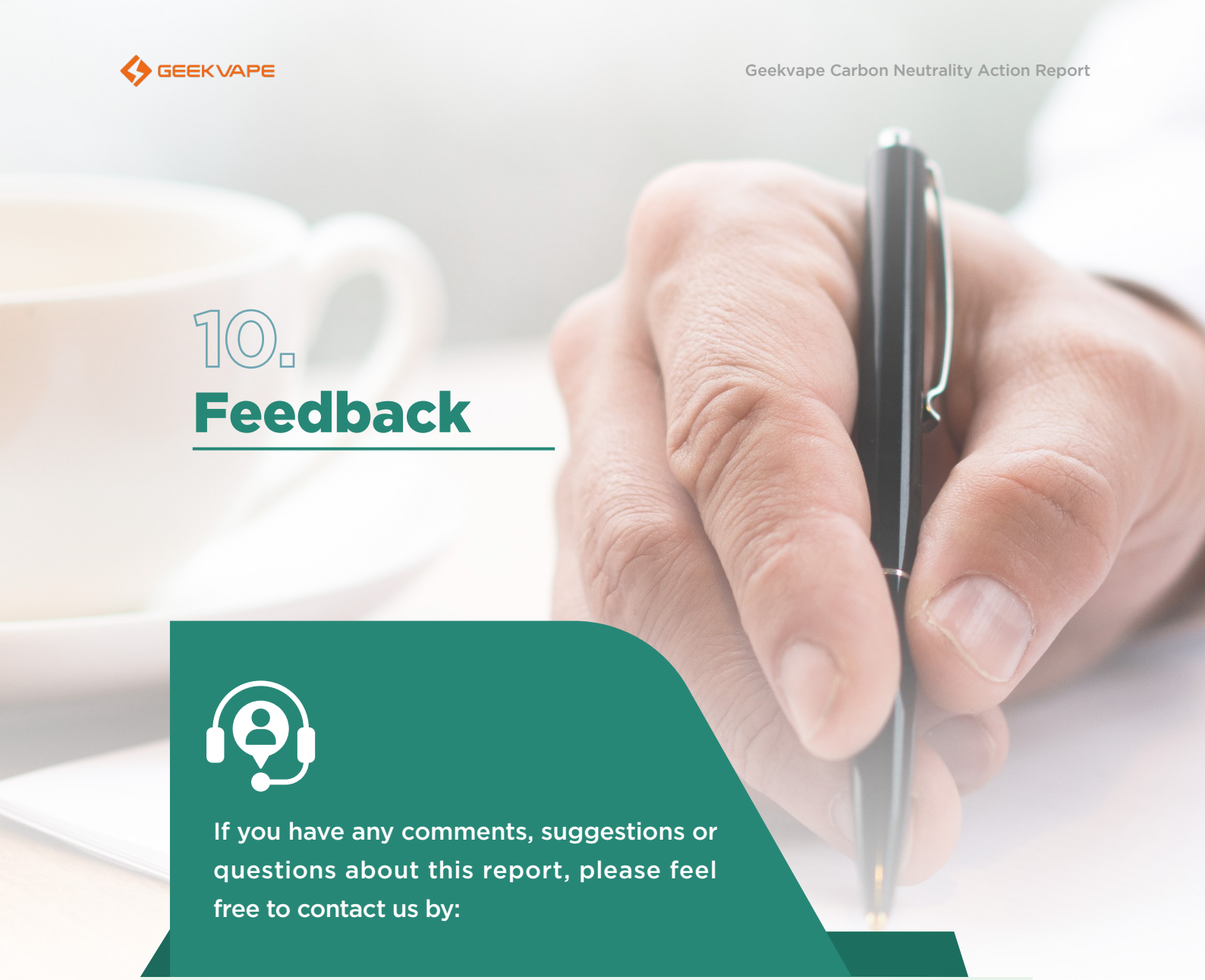
Quantification of Greenhouse Gas Emission
The Inventory Report covering the period 1 January to 31 December 2023, it is DNV's opinion that the Inventory Report results in quantification of GHG emissions that are real, transparent and measurable.

Organizational Boundary of Verification
☐Financial Management Control ☒Operational Management Control ☐Equity Share

GHGs Verified
☒CO_2 ☒CH_4 ☒N_2O ☒HFCs ☒PFCs ☒SF_6 ☒NF_3

GHG Inventory Categories – GHG Protocol	[illegible]
Scope 1 - Direct GHG Emissions [1]	**54.63**
Scope 2 - Indirect GHG emissions from imported energy (market-based)[2]	**7,113.73**
Scope 3_total emissions[3]	**368,894.64**
Scope 3_C1 – Purchased goods and services	240,920.11
Scope 3_C2 – Capital goods	[illegible]
Scope 3_C3 – Fuel- and energy-related activities (not included in scope 1 or scope 2)	[illegible]
Scope 3_C4 – Upstream transportation and distribution[4]	[illegible]
Scope 3_C5 – Waste generated in operations	[illegible]
Scope 3_C6 – Business Travel	[illegible]
Scope 3_C7 – Employee commuting	[illegible]
Scope 3_C9 – Downstream transportation and distribution[4]	35,802.27
Scope 3_C11 – Use of sold products[5]	59,579.39
Scope 3_C12 – End-of-life treatment of sold products	[illegible]
Scope 3_C15 – Investments	[illegible]
Total Emissions[6]	**376,062.99**

[illegible]



10. Feedback

If you have any comments, suggestions or questions about this report, please feel free to contact us by:

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Tel:
+86-0755-23029820

Contact email:
sustainability@geekvape.com

Company website:
http://www.geekvape.cn
http://www.geekvape.com

Scan the QR code to know more about Geekvape's sustainability journey.


GEEKVAPE